Construction Spending, Labor and Materials Outlook

NASFA Webinar

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AGC members' expectations for 2018

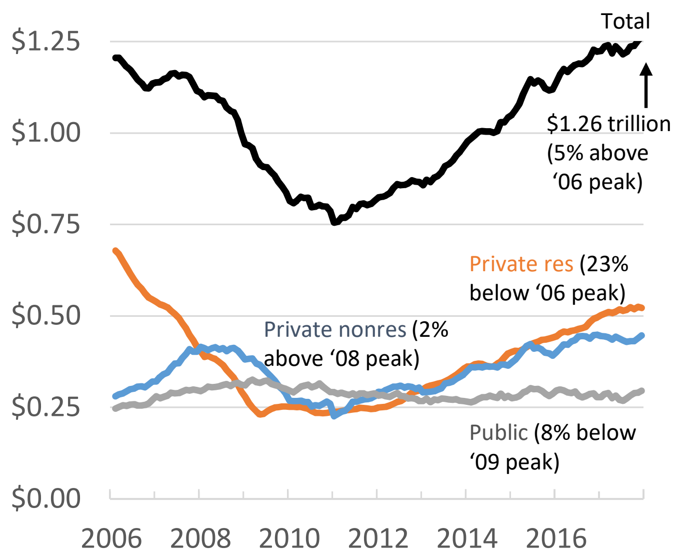
Net % who expect dollar volume of projects to be higher

44%	**All projects**	17%	Highway
22%	Private office	17%	Hospital
21%	Retail/warehouse/lodging	16%	Public building
21%	Transportation facilities	16%	Multifamily
20%	Manufacturing	13%	Power
20%	Water/sewer	11%	Higher education
18%	K-12 school	8%	Direct federal construction

Source: AGC Construction Outlook Survey, Jan. 2018 (1,046 total responses)

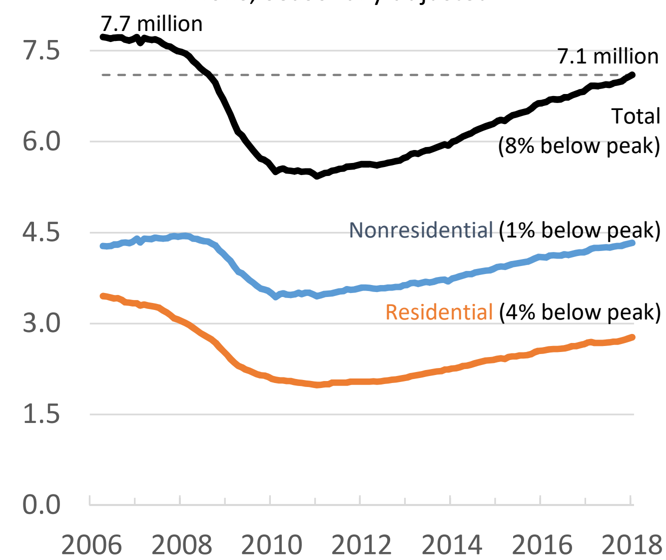
Construction spending & employment, 2006-2018

Total spending, Feb. '06 (prior peak)-Jan. '18
trillion $, seasonally adjusted annual rate



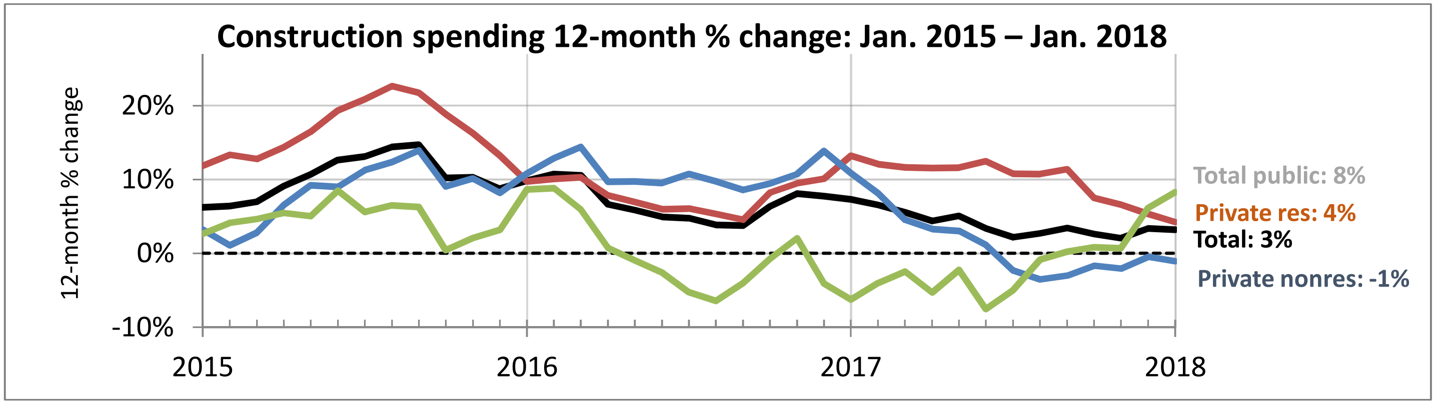
Jan. 2017-Jan. 2018: total 3.2%
private res. 4%, private nonres. -1%, public 8%

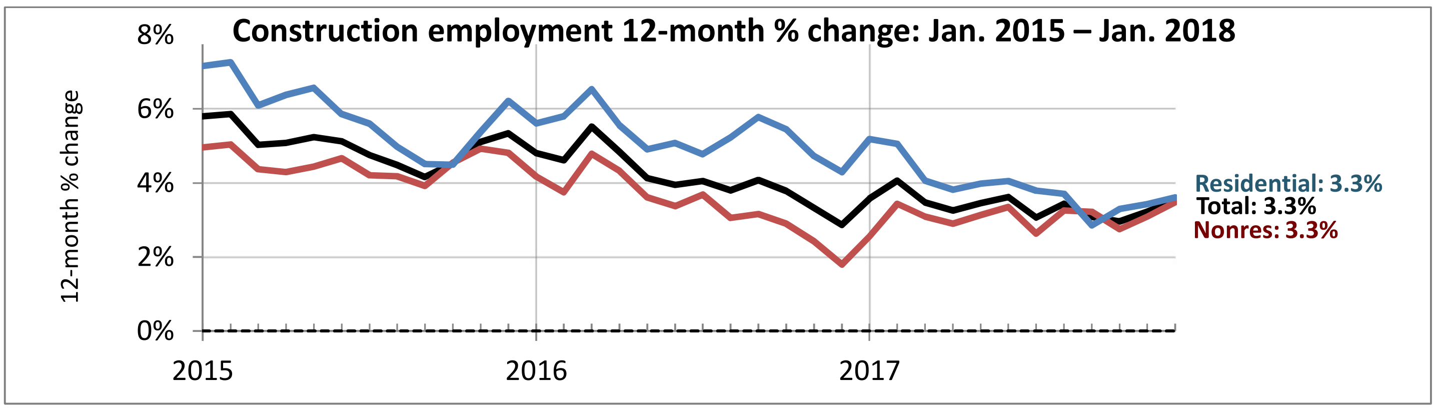
Total employment, Apr. '06 (peak)-Jan. '18
millions, seasonally adjusted



Jan. 2017-Jan. 2018: total 3.3%
residential 3.3%, nonresidential 3.3%

Construction spending & employment, 2015-2018





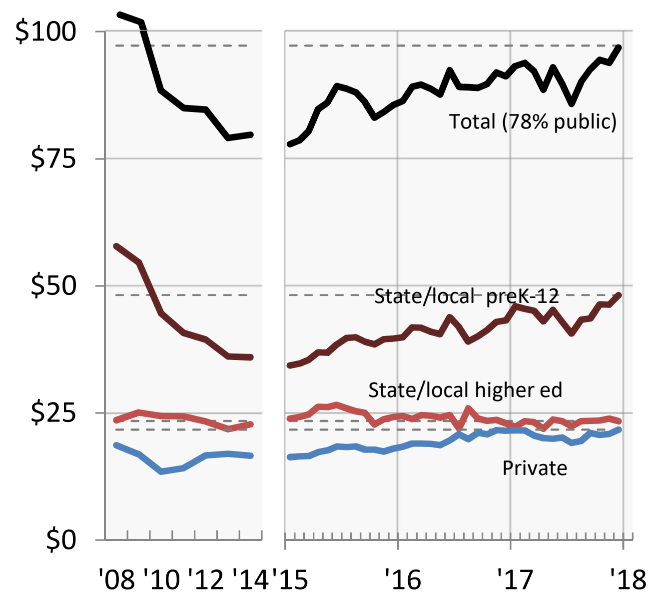
Nonresidential segments: 2017 change, 2018 forecast

	2017 vs. 2016	Jan '18 vs. Jan '17	2018 forecast
Nonresidential total (public+private)	**-.3%**	**2%**	**1-5%**
Power (incl. oil & gas field structures, pipelines)	-6	-9	positive
Educational	2	5	positive
Highway and street	-4	4	small pos.
Commercial (retail, warehouse, farm)	14	6	less pos.
Office	2	-3	less pos.
Manufacturing	-12	-10	small pos.
Transportation	4	20	positive
Health care	4	12	small pos.
Lodging	6	11	negative
Sewage & waste disposal	-13	8	near 0
Other--amusement; communication; religious; public safety; conservation; water: 11% of '17 total	0	7	

Construction spending: education, health care

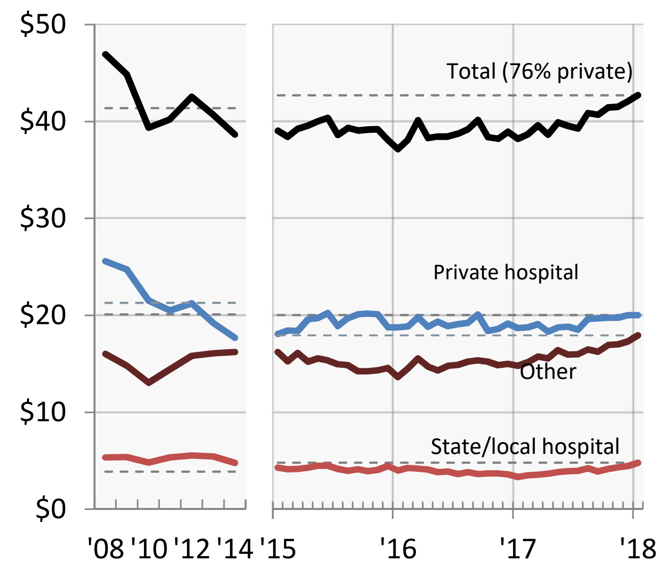
annual total, 2008-14; monthly (seasonally adjusted annual rate), 1/15-1/18; billion $

Education: state/local K-12, S/L higher; private



Jan '17-Jan '18 change: -3% (private -2%; state/local preK-12 6%; state/local higher ed 8%)

Health care: (private hospital, S/L hospital, other)



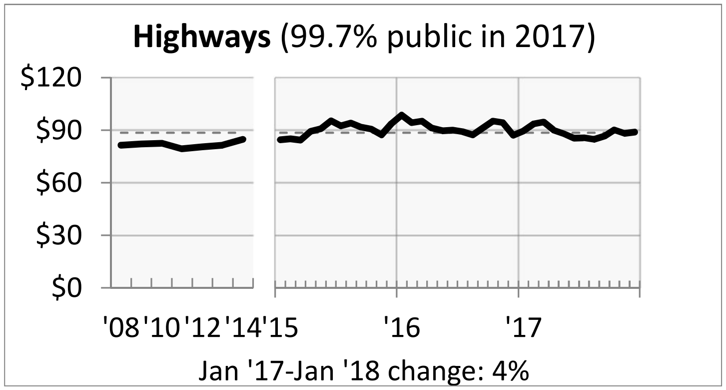
Jan '17-Jan '18 change: 1% (private hospital -3%; S/L hospital 44%; other: special care, med. office, federal 20%)

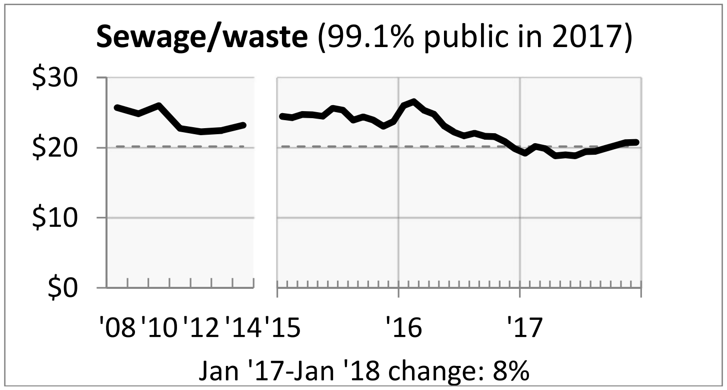
Key points: education & health care

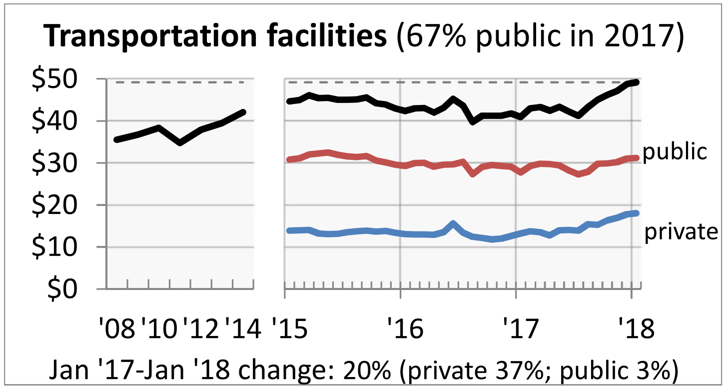
- Rising house & commercial property values are supporting school district tax receipts & bond issues for preK-12 projects
- Higher-ed enrollment declined 21% from 2011 to 2016, so colleges need fewer dorms & classrooms; apts. (multifamily) replacing dorms (educational construction)
- Rising stock prices help private school & college capital campaigns
- Health care spending is shifting from hospitals to special care facilities (standalone urgent care, surgery, rehab, hospices)

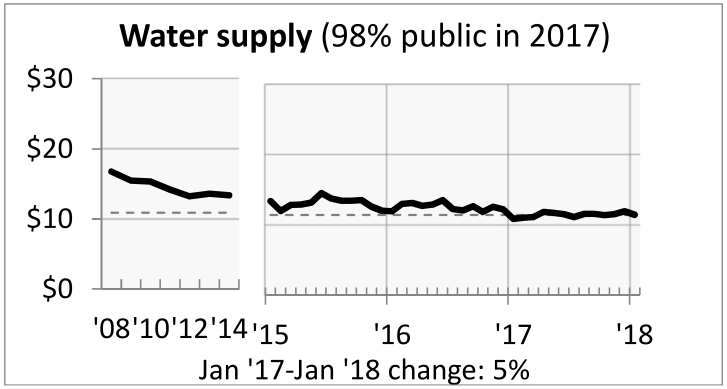
Construction spending: public works

annual total, 2008-14; monthly (seasonally adjusted annual rate), 1/15-1/18; billion $







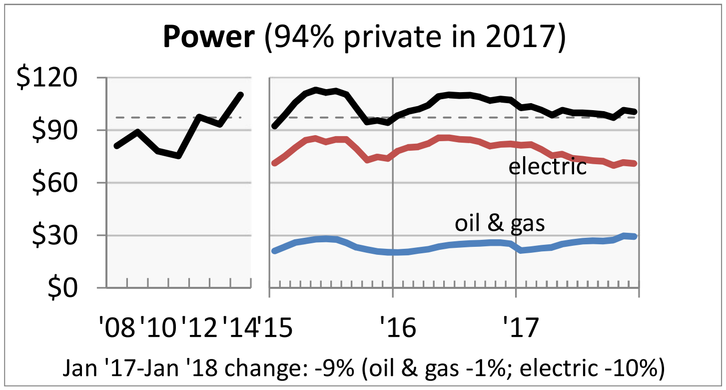


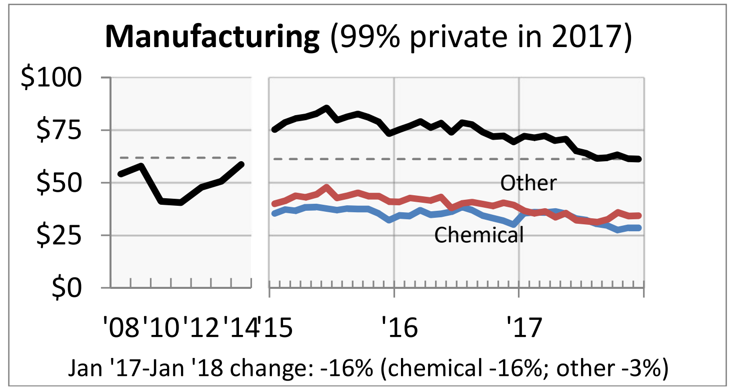
Key points: roads, transportation, sewer/water

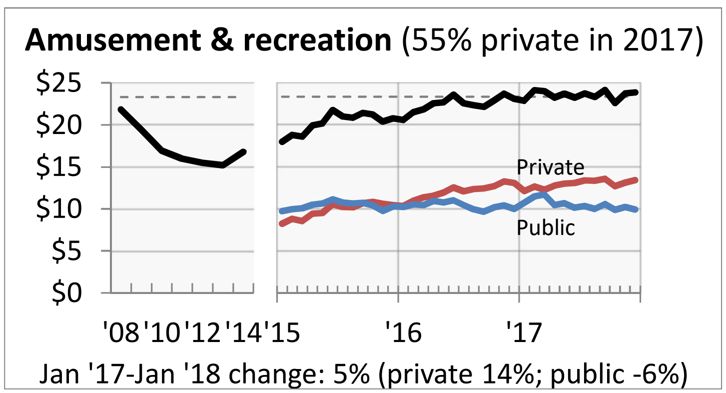
- State highway funding and P3s gradually increasing but federal funding likely to be flat through 2018; pickup likely by 2019
- Many new and ongoing public & private airport projects; revival of freight rail construction; but no net increase likely in public funding for port, passenger rail or transit construction
- Huge declines in water & sewer spending in 2017: hard to explain and unlikely to be repeated

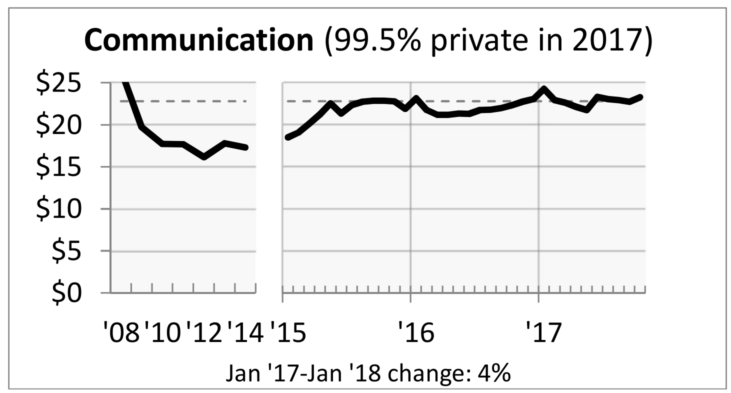
Construction spending: industrial, heavy

annual total, 2008-14; monthly (seasonally adjusted annual rate), 1/15-1/18; billion $







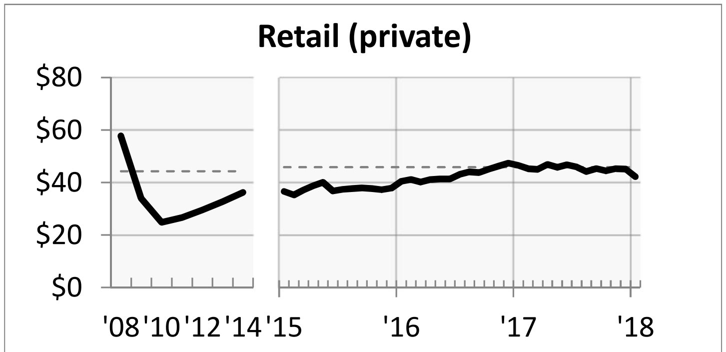


Key points: power & energy, mfg, amusement & recreation

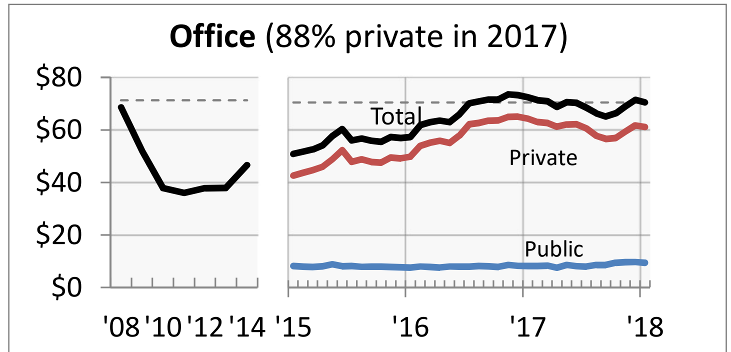
- Solar, wind power are growing again; expect more gas-fired plants, natural gas pipelines in ‘18
- Manufacturing construction should recover in ‘18 based on energy projects, tax-induced reshoring, U.S. & global economic growth, weaker dollar; but tariffs, foreign retaliation are a concern
- Amusement & recreation spending is very “lumpy”—a few big stadiums at irregular intervals; but funding for local, state, federal parks keeps eroding

Construction spending: developer-financed

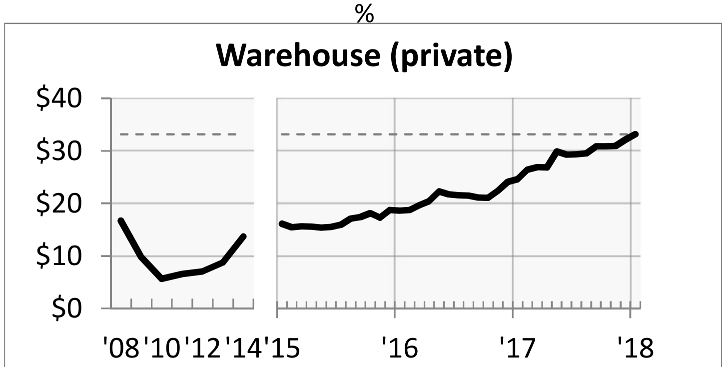
annual total, 2008-14; monthly (seasonally adjusted annual rate), 1/15-1/18; billion $



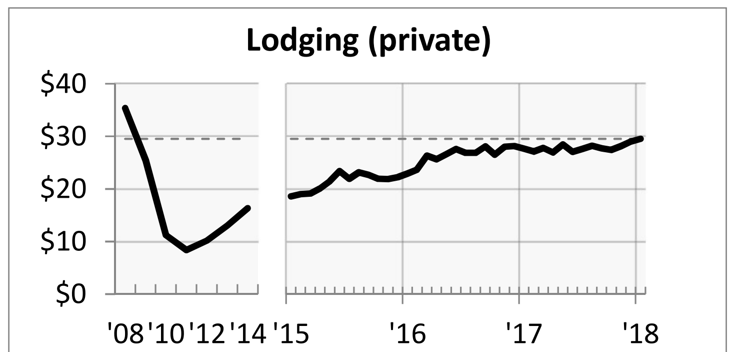
Jan '17-Jan '18 change: -9%
%



Jan '17-Jan '18 change: -3% (private -5%; public 14%)



Jan '17-Jan '18 change: 35%



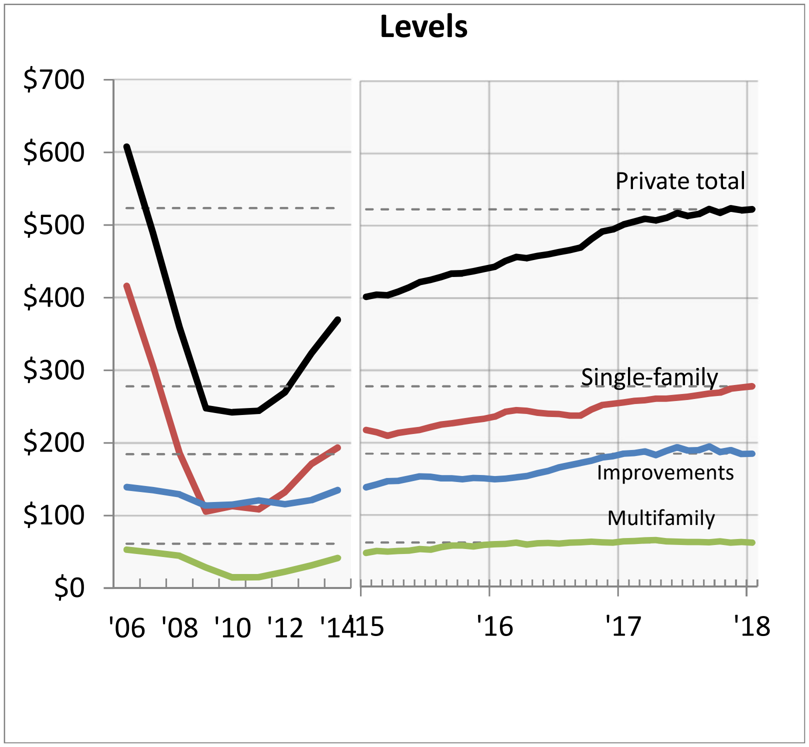
Jan '17-Jan '18 change: 7%

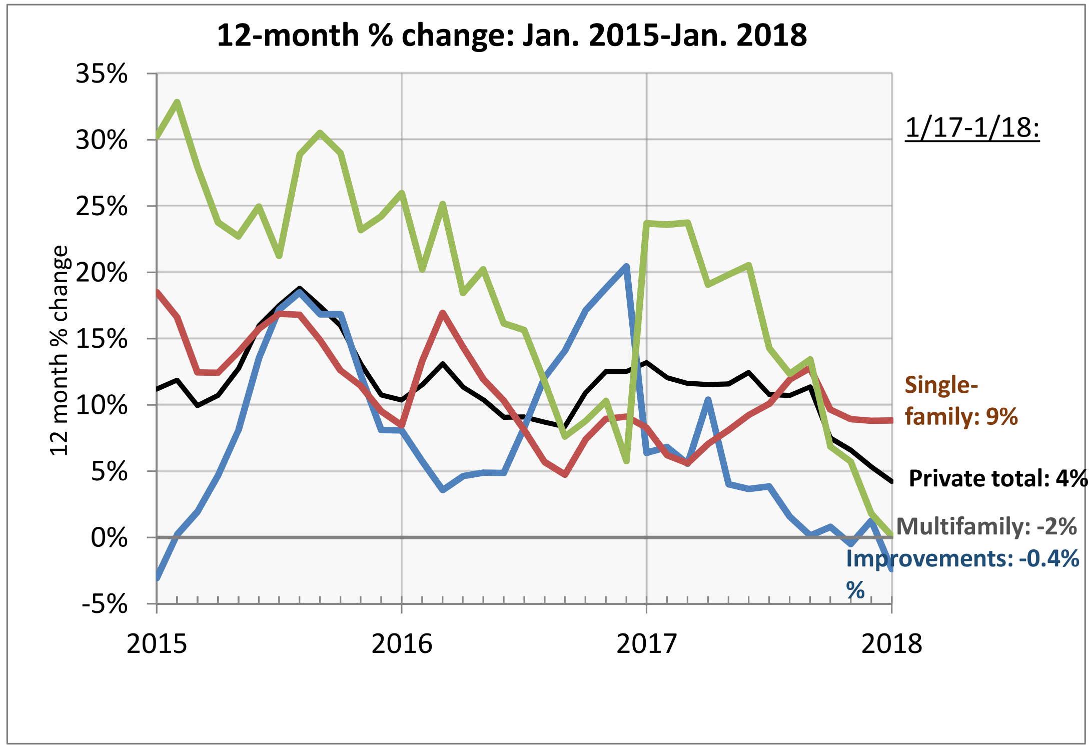
Key points: retail, warehouse, office, hotel, data centers

- Retail now tied to mixed-use buildings & renovations, not standalone stores or shopping centers; massive store closings imply downturn in '18
- Warehouse growth is still benefiting from e-commerce; more local than huge regional distribution centers likely in future; self-storage is booming
- Office growth is slowing; employment still rising but space per worker is shrinking; more urban & renovation work than suburban office parks
- Hotel: more markets reaching saturation; more competition from Airbnb
- Data centers remain a strong niche but no data available on how strong

Private residential spending: steady single-family growth, slower multifamily

annual total, 2006-14; monthly (seasonally adjusted annual rate), 1/15-1/18; billion $

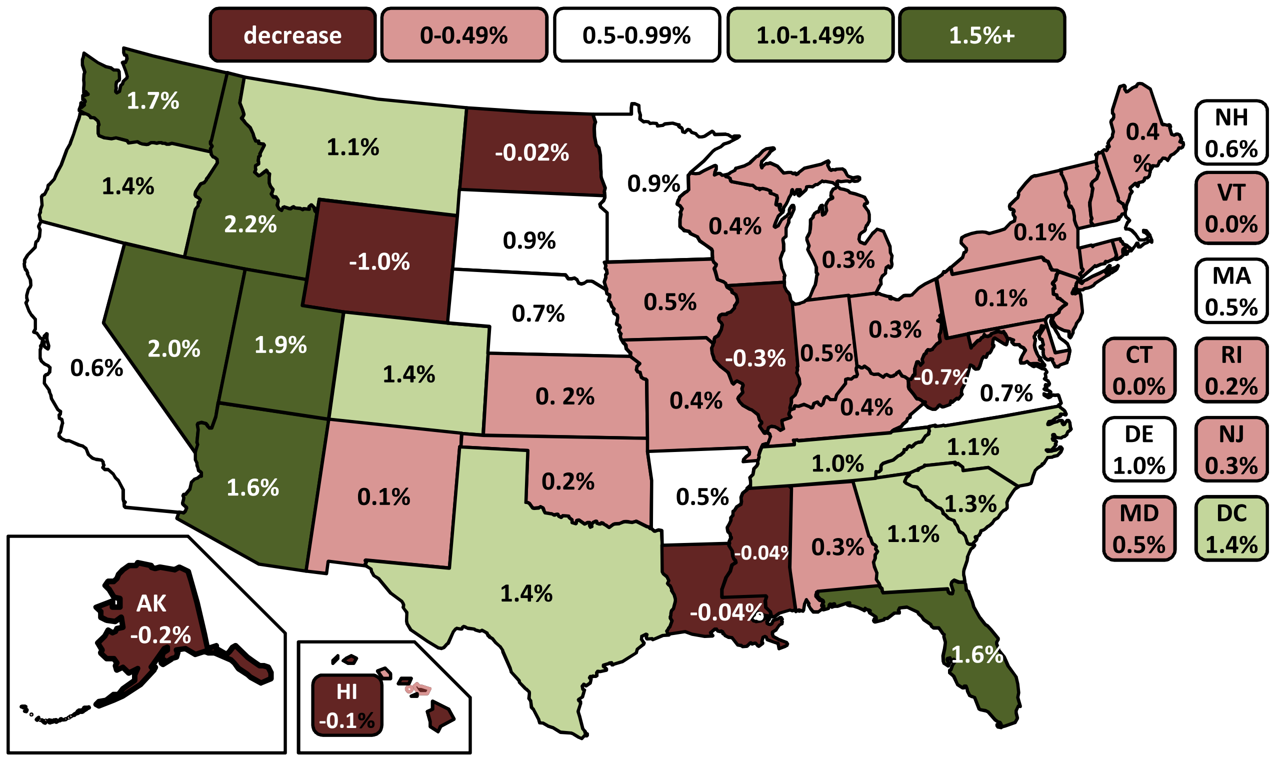




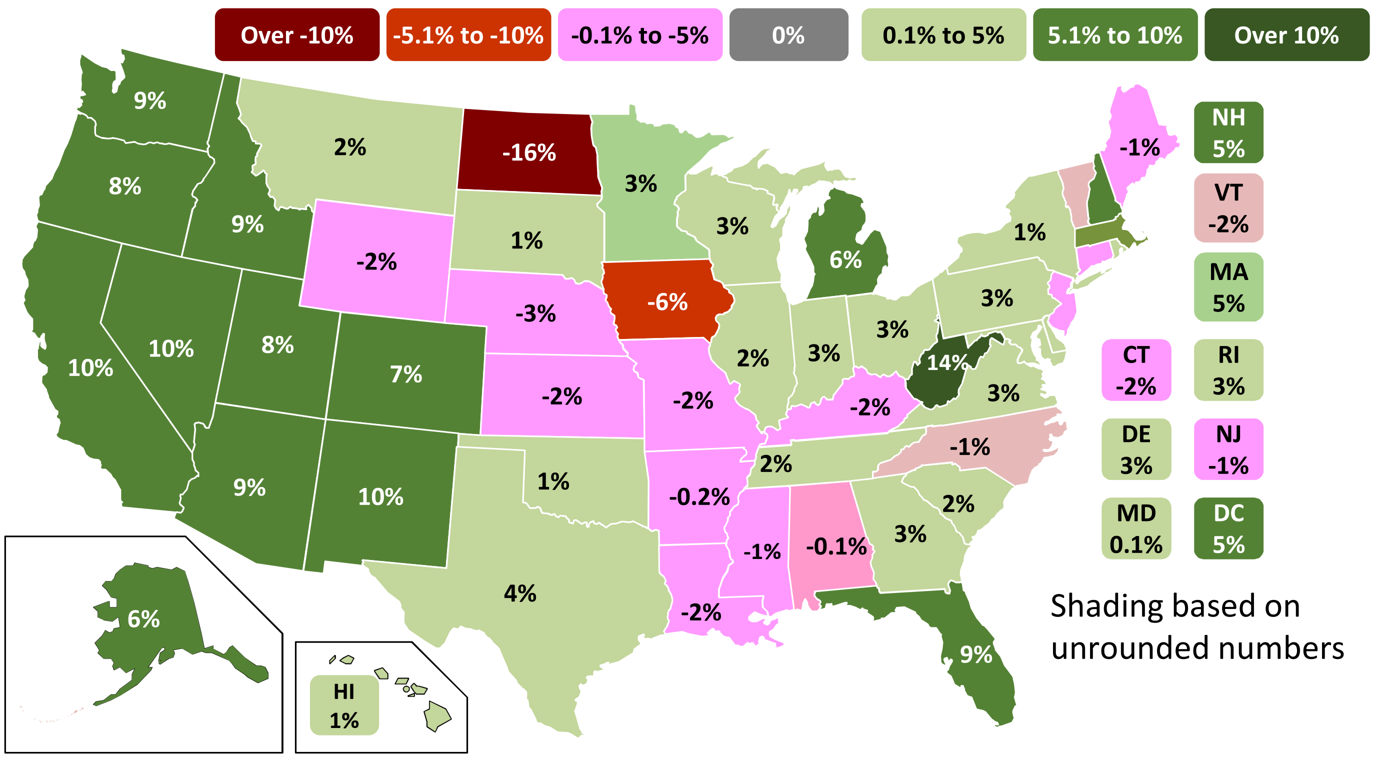
Private residential spending forecast--2018: 6-9% (11% in 2017)

- SF: **8-10% in 2018** (9% in 2017); rising interest rates, tax law changes, student debt will limit number of potential buyers
- MF: **near 0 in 2018** (3% in 2017)
  - occupancy rates, rents have leveled off; starts, permits are down from 2016
  - millennials are staying longer in cities and denser suburbs where MF construction is bigger share of market than in outer suburbs
  - nearly all MF construction is rental, not condo; more high-rises
- Improvements: **10-15% in 2018** (15% in 2017); unpredictable because Census lacks reliable data; post-disaster reconstruction (TX, FL, CA) may boost totals

Population change by state, July 2016-July 2017 (U.S.: 0.72%)



State construction employment change (U.S.: 3.5%)
1/17 to 1/18: 35 states +DC up, 15 states down



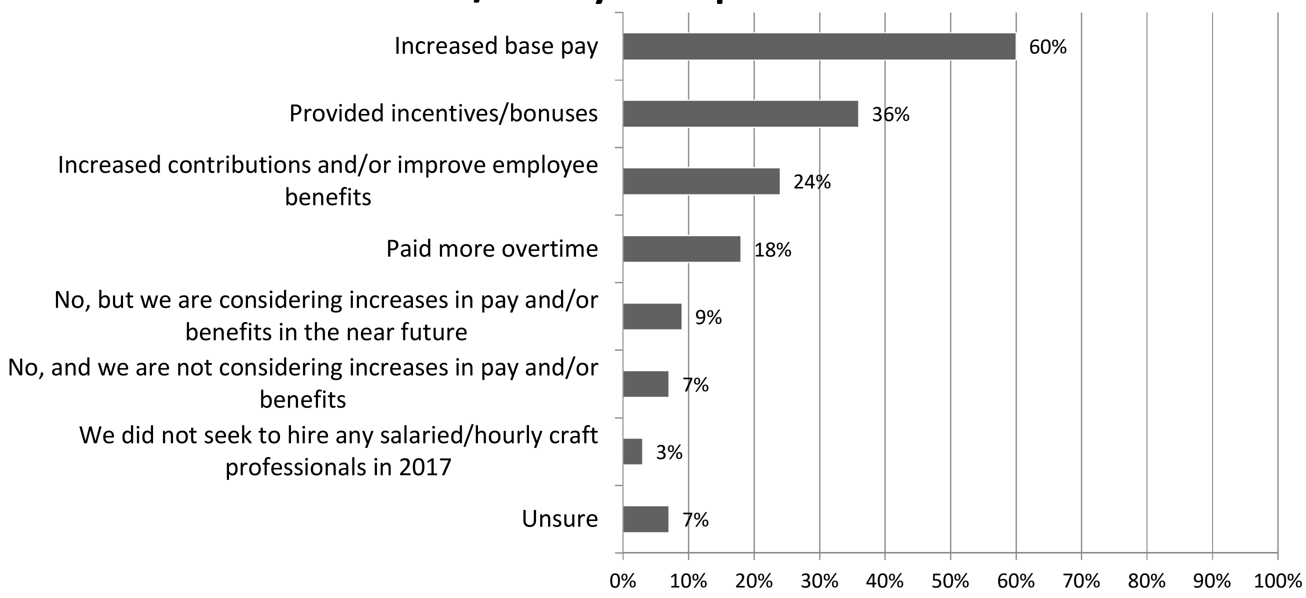
Shading based on unrounded numbers

FIRMS WILL CONTINUE TO COPE WITH WORKER SHORTAGES

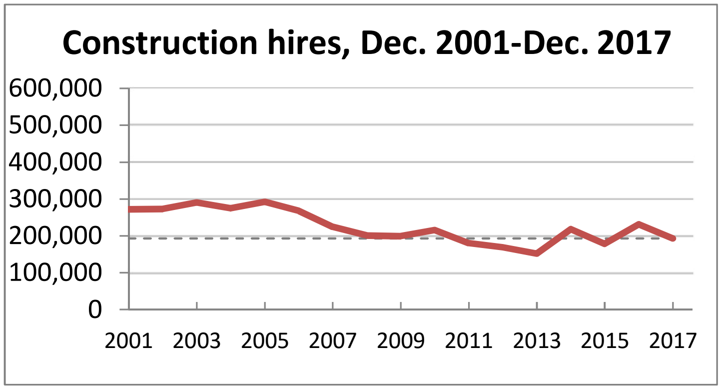
How would you describe your firm's current conditions for filling key salaried positions (project manager/supervisor, estimator, etc.) and hourly craft positions (carpenter, laborer, equipment operator, etc.)? My firm is:

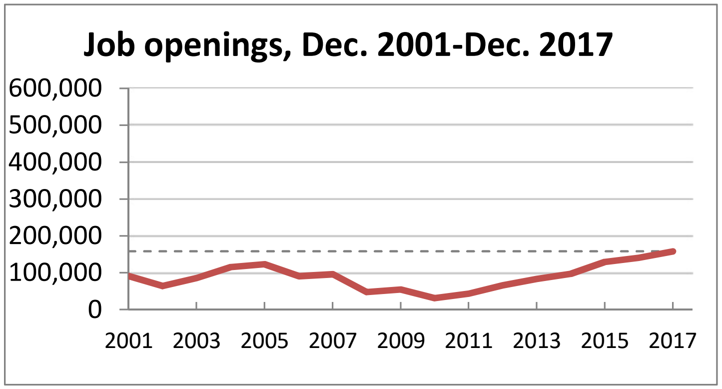
MOST FIRMS ARE INCREASING PAY OR BENEFITS…

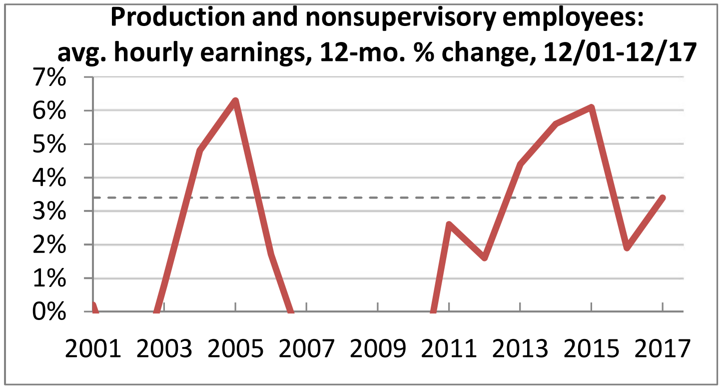
Did your firm increase pay or benefits in 2017 to retain or recruit salaried/hourly craft professionals?



Construction workforce indicators (not seasonally adjusted)







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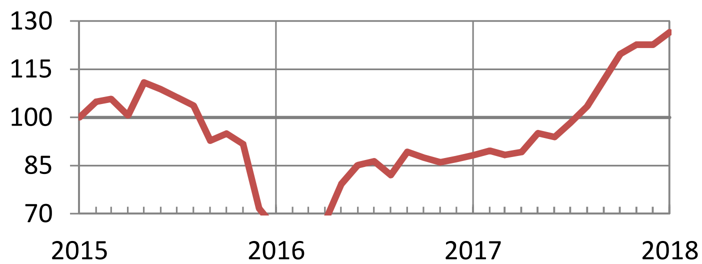
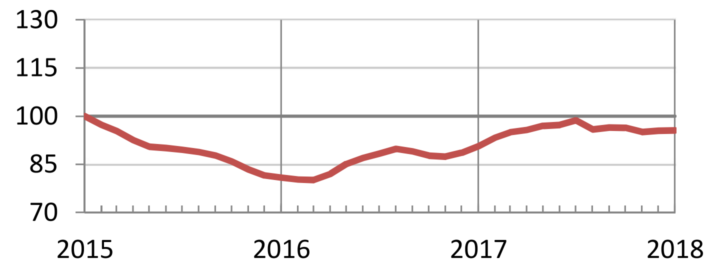
Producer price indexes for key inputs, 1/15-1/18 (Jan. 2015=100)

Diesel fuel



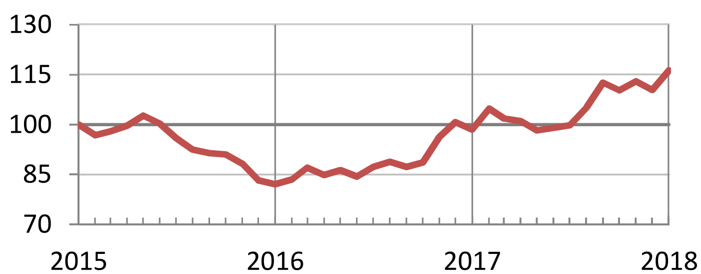
Latest 1-mo. change: 3.2%, 12-mo.: 43%

Steel mill products



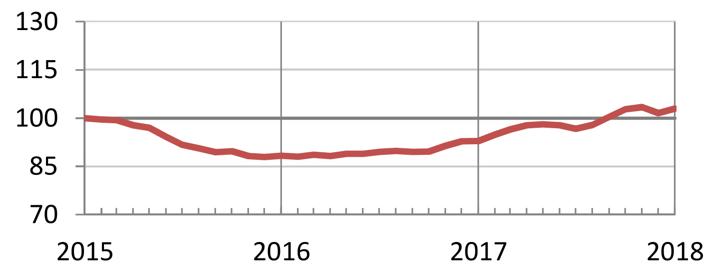
Latest 1-mo. change: 0.1%, 12-mo.: 5%

Copper & brass mill shapes



Latest 1-mo. change: 5.4%, 12-mo.: 18%

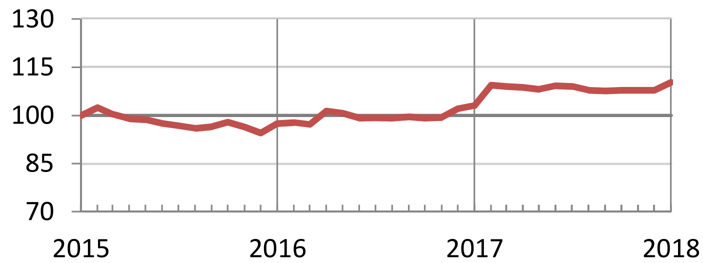
Aluminum mill shapes



Latest 1-mo. change: 1.4%, 12-mo.: 11%

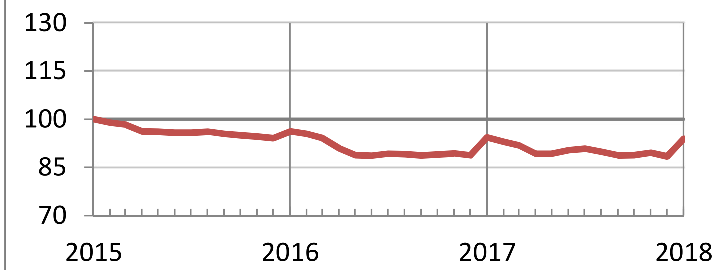
Producer price indexes for key inputs, 1/15-1/18 (Jan. 2015=100)

Gypsum products



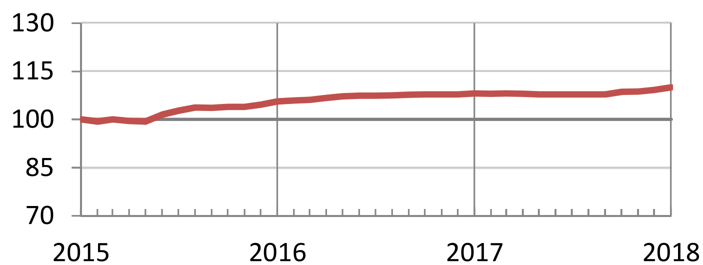
Latest 1-mo. change: 2.3%, 12-mo.: 7%

Paving mixtures



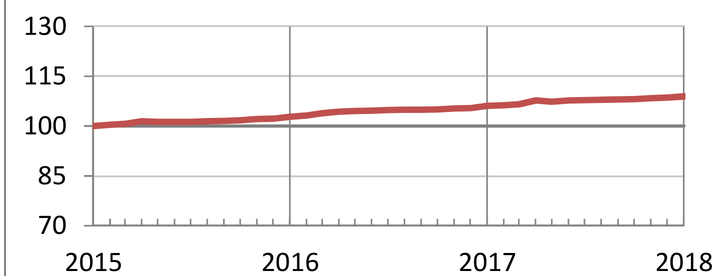
Latest 1-mo. change: 6.2%, 12-mo.: 0%

Flat glass



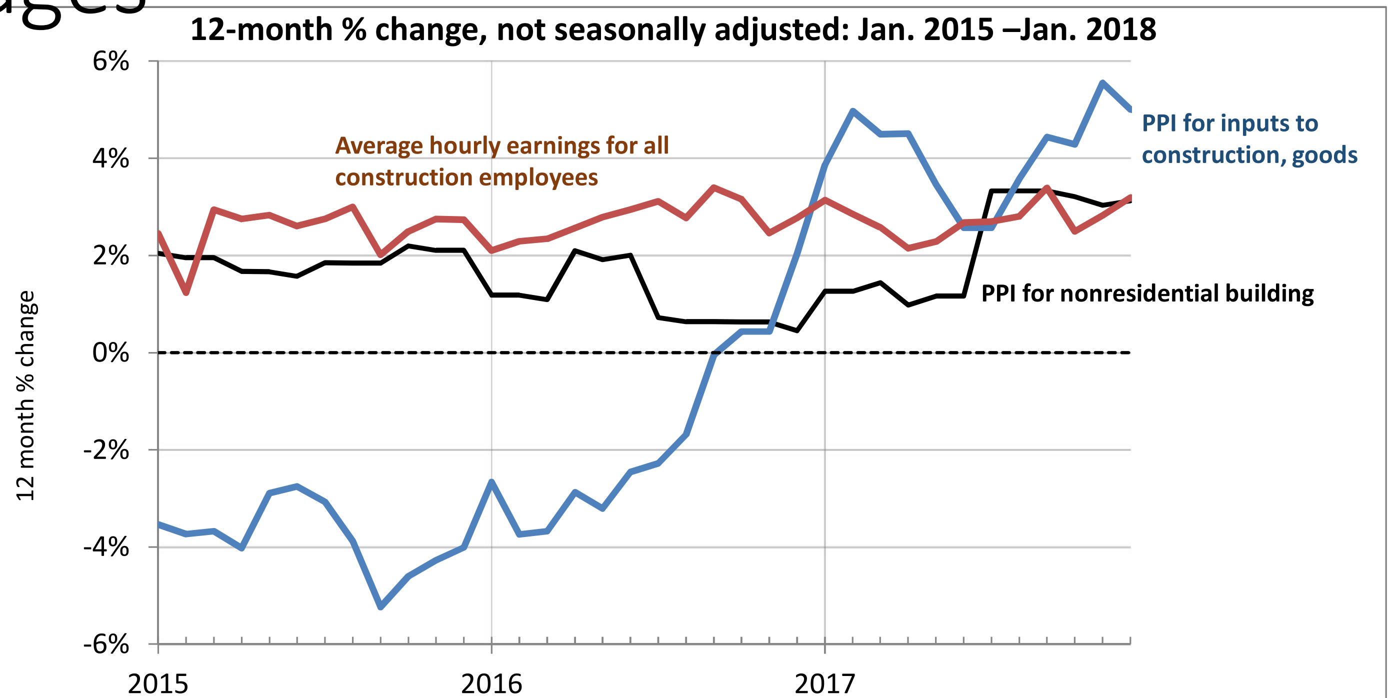
Latest 1-mo. change: 0.7%, 12-mo.: 2%

Concrete products



Latest 1-mo. change: 0.4%, 12-mo.: 3%

Change in costs for buildings, material inputs and wages



Latest 12-mo. change: PPI for nonresidential building: 3.6%; PPI for inputs to construction, goods: 4.9%; average hourly earnings for all construction employees: 2.9%

2016-2017 summary, 2018 forecast

	2016 actual	2017 actual	2018 forecast
Total spending	6%	4%	2-7%
Private – residential	11%	11%	6-9%
– nonresidential	8%	1%	1-5%
Public	-1%	-2%	-3 to 3%
Goods & services inputs PPI	1%	4%	4-5%
Employment cost index	2.2%	2.5%	3-4%

AGC economic resources

(email simonsonk@agc.org)

- *The Data DIGest*: weekly 1-page email (subscribe at http://store.agc.org)
- monthly press releases: spending; PPI; national, state, metro employment
- yearly employment & outlook surveys, state and metro data, fact sheets: www.agc.org/learn/construction-data
- outlook webinar May 10 with Kermit Baker, AIA; Alex Carrick, ConstructConnect

Data DIGest

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Sept. 24-Oct. 2, 2009
Vol. 9, No. 33

Construction job losses remain heavy, widespread; homebuilding rises, nonres sinks

Download the one-page Data DIGest

City-by-City Construction Employment, August 2009 and 2008

Seasonally adjusted nonfarm payroll **job losses** in September totaled 263,000, barely half the average of the last 12 months, the Bureau of Labor Statistics (BLS) reported on Friday. (Seasonal adjustment takes into account normal monthly variations in weather and numbers of work days.) ***But construction****, particularly nonresidential, continued to hemorrhage jobs. Construction lost 15% of its September 2008 jobs in the last 12 months, compared to 4% for the entire nonfarm economy. September losses totaled 51,000 in nonresidential building, specialty trade, and heavy and civil engineering construction combined, nearly the monthly average loss of 54,000 over the past 12 months. Residential building and specialty trade contractors shed a combined 13,000 jobs in September, barely a third as many as the monthly average over the 12-month span. One faintly positive sign was that* ***architectural and engineering services employment****, a harbinger of future demand for construction, rose for the first time in 15 months, albeit by only 500 jobs (0.04%).* ***Average hourly earnings*** *in construction tumbled 16 cents to $22.45 in September, bringing the 12-month change to 36 cents or 1.6%, compared to 2.5% for all private-sector production or nonsupervisory employees.* The overall **unemployment rate** climbed to 9.5% in September, not seasonally adjusted (9.8%, seasonally adjusted) from 6.0% a year earlier. *The* ***unemployment rate in construction****, 17.1%, not seasonally adjusted, again topped every other industry and was up from 9.9% a year earlier.*

For the eighth month in a row, all 372 **metro areas** had higher **unemployment rates** in August than a year earlier, BLS reported on Wednesday. (Seasonally adjusted industry and metro unemployment rates are not available.) Of the 369 areas reporting nonfarm payroll employment, 356 had year-to-year losses, 11 had gains and two were unchanged. The largest percentage gains were in Sandusky, Ohio, 2.7%; Hot Springs, Arkansas, 2.6%; Kennewick-Pasco-Richland, Washington, 2.5%; Jonesboro, Ark., 1.9%; and McAllen-Edinburg-Mission, Texas, 1.5%. *If sustained, these gains can lead to more demand for construction. AGC compiled a list of 337 areas, including divisions and subdivisions of the 34 largest metros, for which BLS provided construction employment figures (combined with mining and logging in metros where employment in these industries is small).* ***Construction employment*** *fell over the past 12 months in 324 of these locations, rose in eight and was unchanged in five. The largest 12-month percentage construction employment gains were in Columbus, Indiana, 14% (combined data); Anderson, Ind., 6% (combined); Tulsa (construction only); Longview, Wash. (combined) and Baton Rouge (construction only), 3% each. The worst construction job losses were in Reno-Sparks, Nevada, -35% (construction only); Duluth, Minnesota-Wisconsin, -33% (combined); Tucson, -31% (construction only); Wenatchee-East Wenatchee, Wash., -30% (combined); and Redding, California, -28% (combined).*

Construction in Chicago will not get a boost from the Olympics. The International Olympic Committee today awarded the 2016 Games to Rio.

The Data DIGest is a weekly summary of economic news; items most relevant to construction are in italics.

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